FIG. 1

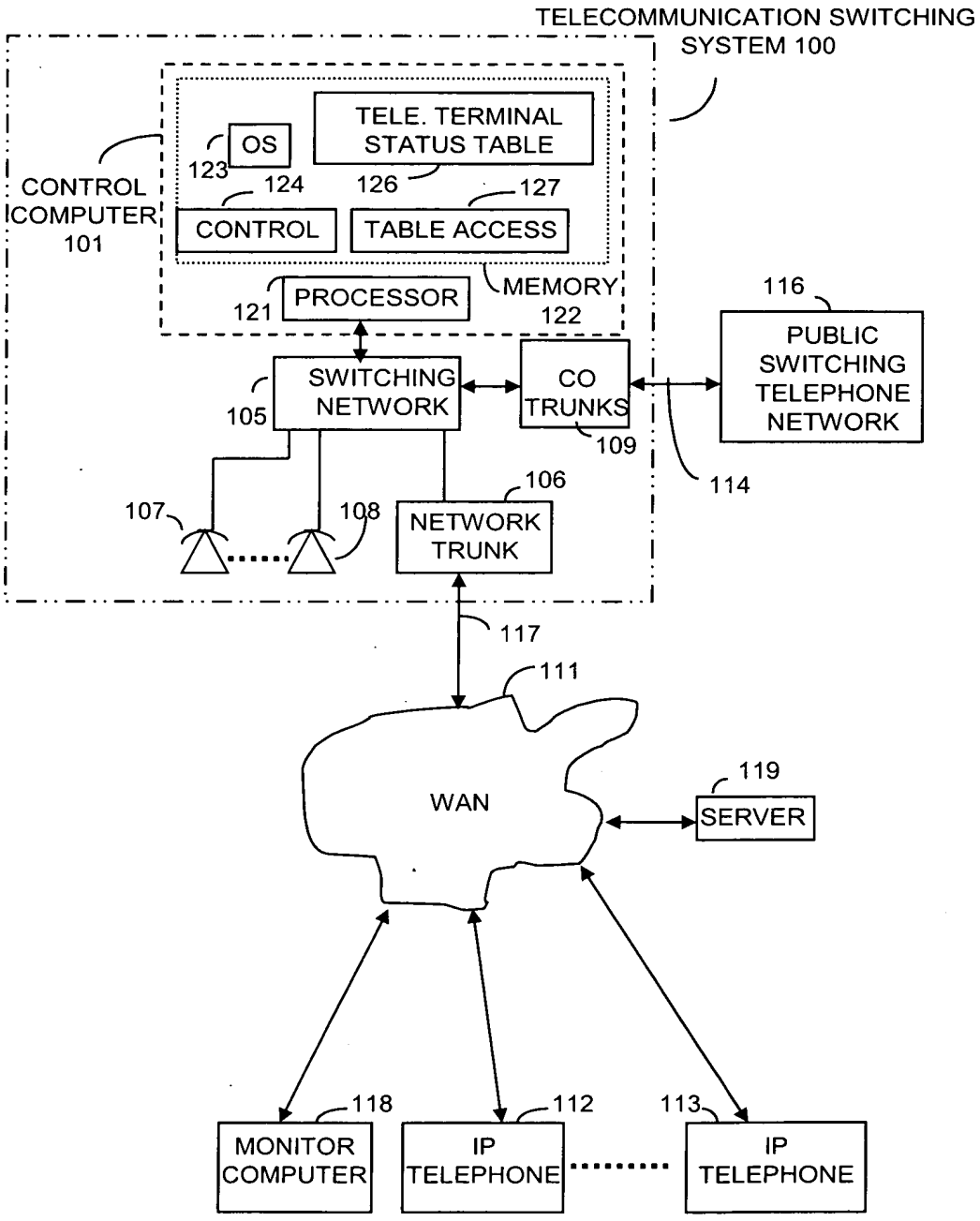

TELECOMMUNICATION SWITCHING SYSTEM 100
CONTROL COMPUTER 101
OS
123
TELE. TERMINAL STATUS TABLE
126
124
CONTROL
127
TABLE ACCESS
MEMORY 122
121
PROCESSOR
116
PUBLIC SWITCHING TELEPHONE NETWORK
SWITCHING NETWORK
105
CO TRUNKS
109
114
106
107
108
NETWORK TRUNK
117
111
WAN
119
SERVER
118
MONITOR COMPUTER
112
IP TELEPHONE
113
IP TELEPHONE

FIG. 2

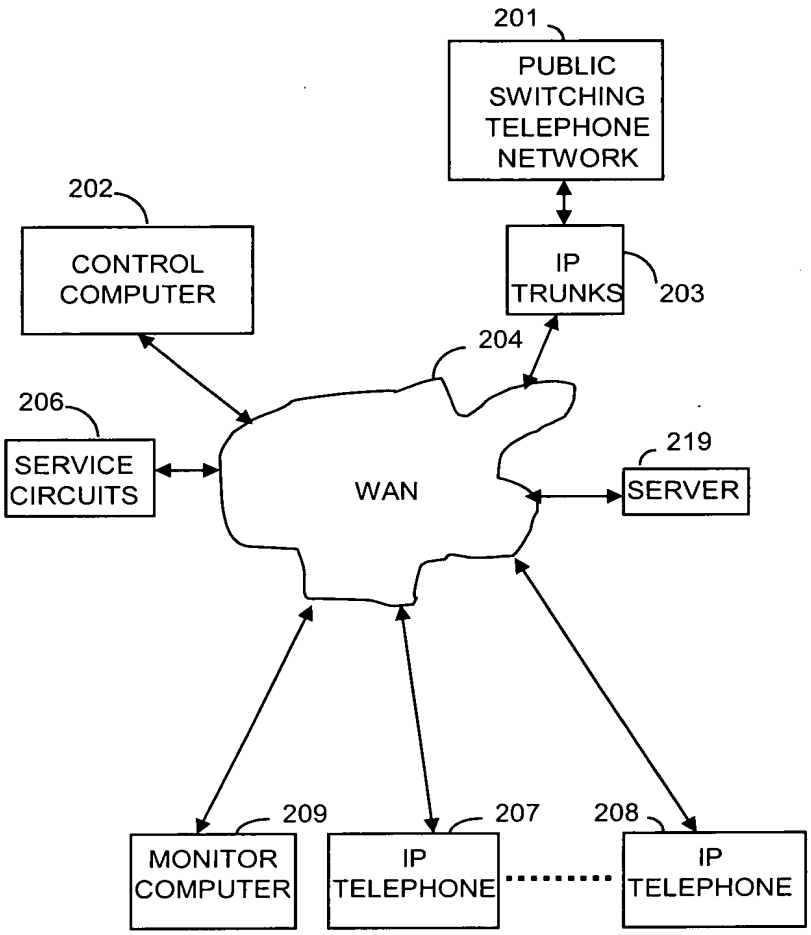

201
PUBLIC SWITCHING TELEPHONE NETWORK
202
CONTROL COMPUTER
IP TRUNKS
203
204
206
SERVICE CIRCUITS
WAN
219
SERVER
209
MONITOR COMPUTER
207
IP TELEPHONE
208
IP TELEPHONE

FIG. 3

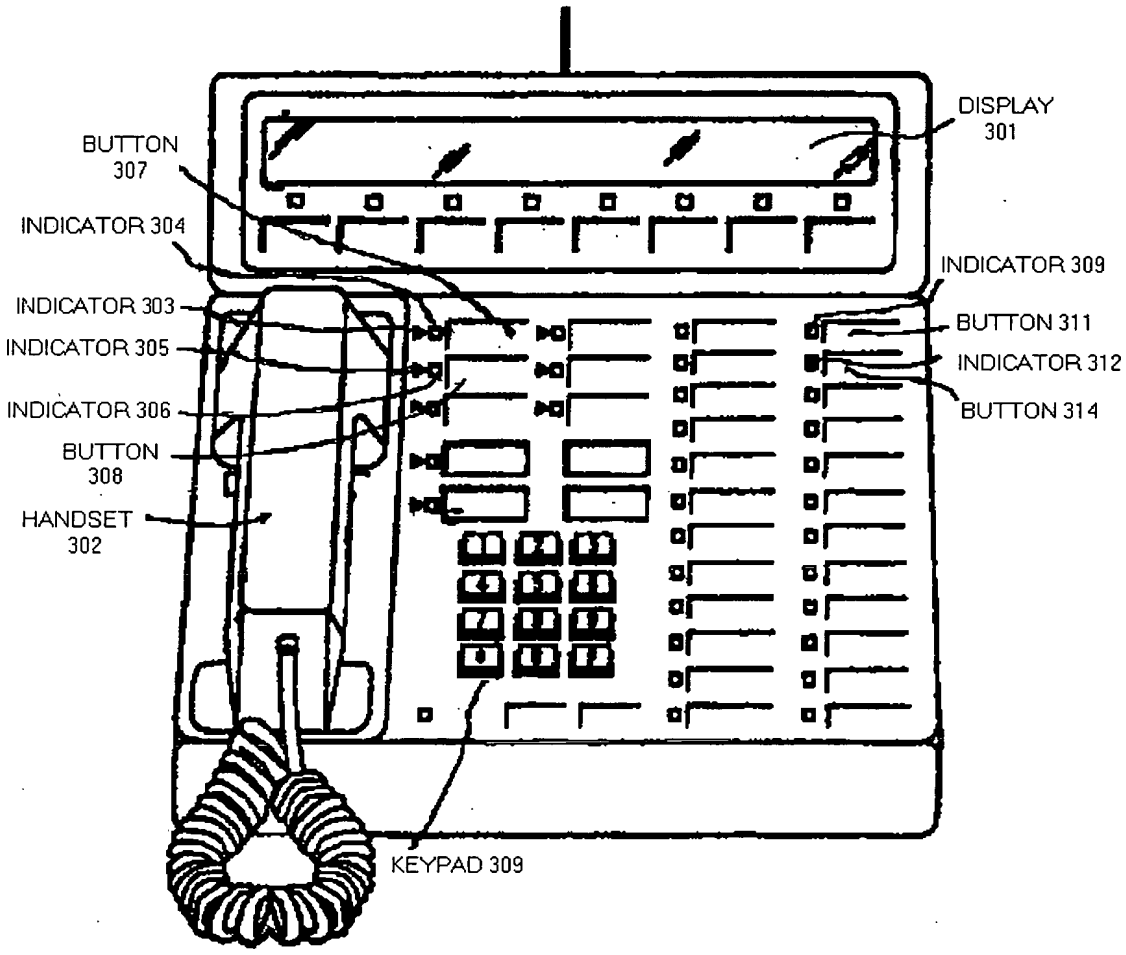

DISPLAY
301
BUTTON
307
INDICATOR 304
INDICATOR 309
INDICATOR 303
BUTTON 311
INDICATOR 305
INDICATOR 312
INDICATOR 306
BUTTON 314
BUTTON
308
HANDSET
302
KEYPAD 309

FIG. 4

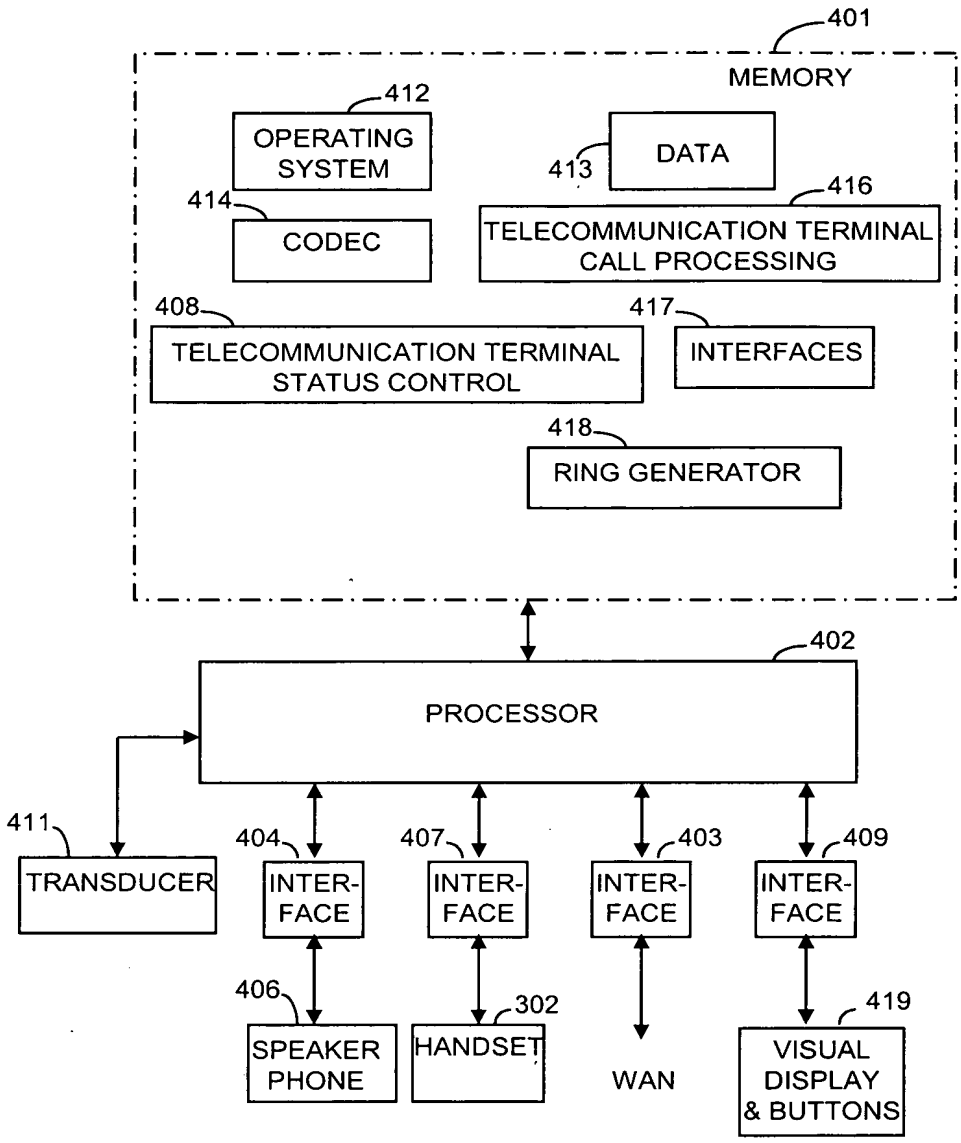

401
MEMORY
412
OPERATING SYSTEM
413
DATA
414
CODEC
416
TELECOMMUNICATION TERMINAL CALL PROCESSING
408
TELECOMMUNICATION TERMINAL STATUS CONTROL
417
INTERFACES
418
RING GENERATOR
402
PROCESSOR
411
TRANSDUCER
404
INTER-FACE
407
INTER-FACE
403
INTER-FACE
409
INTER-FACE
406
SPEAKER PHONE
302
HANDSET
WAN
419
VISUAL DISPLAY & BUTTONS

FIG. 5

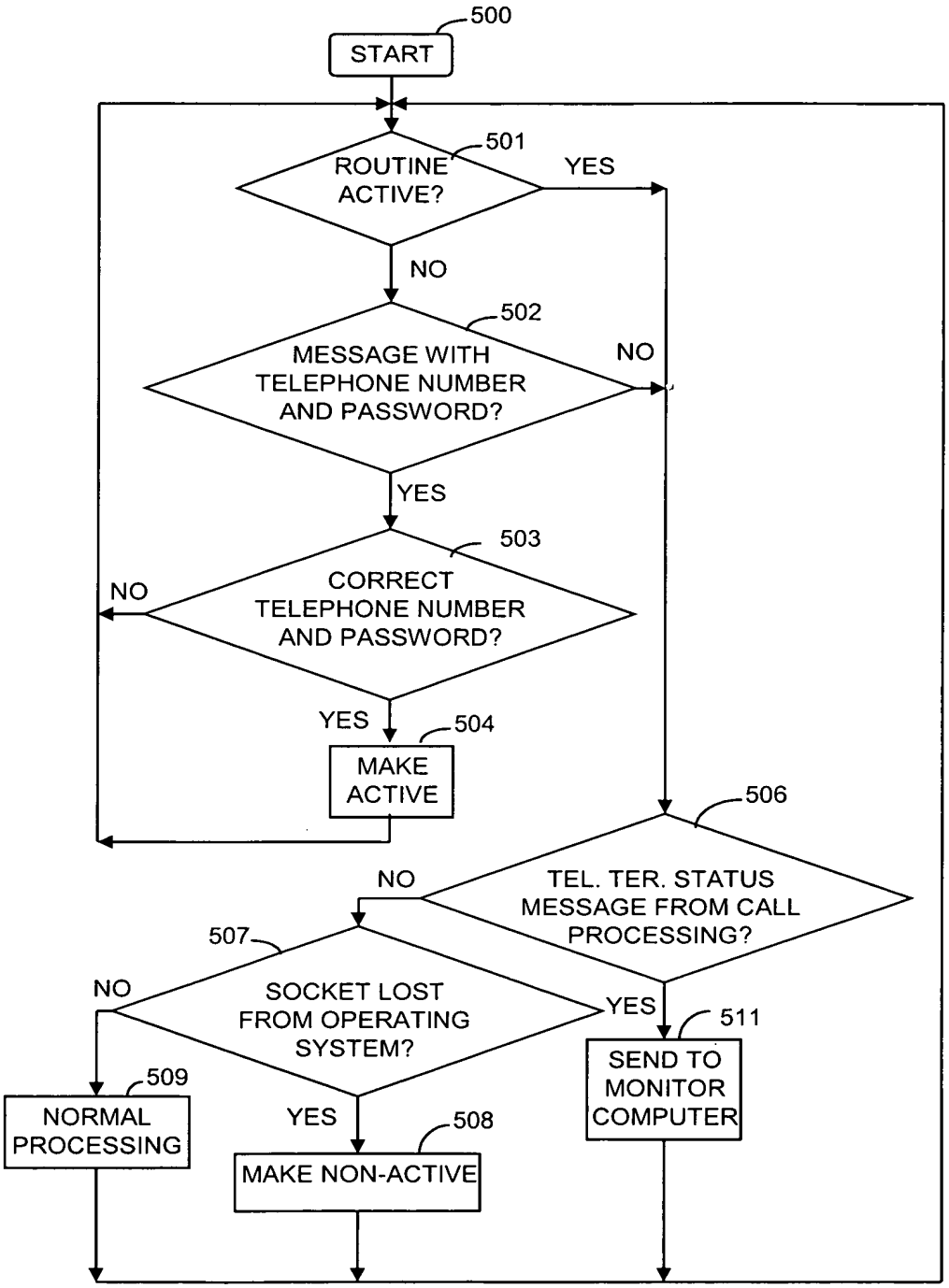
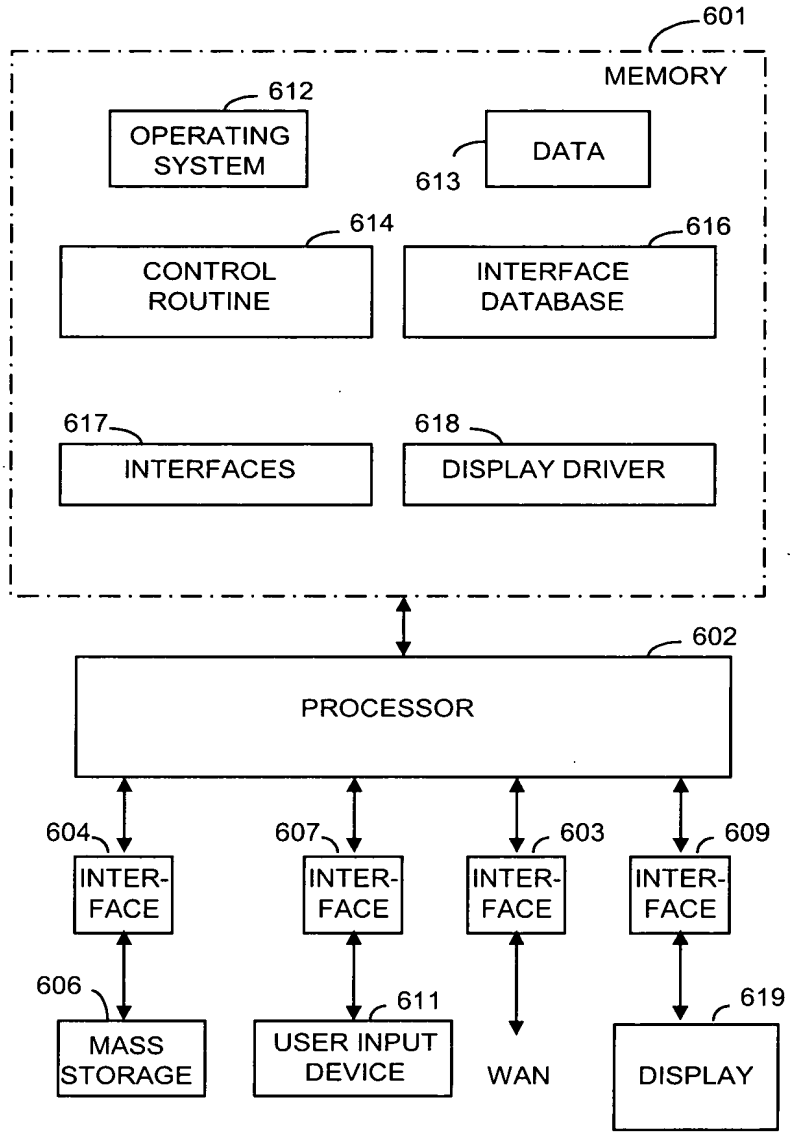

500
START
501
ROUTINE ACTIVE?
YES
NO
502
MESSAGE WITH TELEPHONE NUMBER AND PASSWORD?
NO
YES
503
CORRECT TELEPHONE NUMBER AND PASSWORD?
NO
YES
504
MAKE ACTIVE
506
TEL. TER. STATUS MESSAGE FROM CALL PROCESSING?
NO
507
SOCKET LOST FROM OPERATING SYSTEM?
NO
YES
511
SEND TO MONITOR COMPUTER
509
NORMAL PROCESSING
YES
508
MAKE NON-ACTIVE

FIG. 6


601
MEMORY
612
OPERATING SYSTEM
613
DATA
614
CONTROL ROUTINE
616
INTERFACE DATABASE
617
INTERFACES
618
DISPLAY DRIVER
602
PROCESSOR
604
INTER-FACE
607
INTER-FACE
603
INTER-FACE
609
INTER-FACE
606
MASS STORAGE
611
USER INPUT DEVICE
WAN
619
DISPLAY

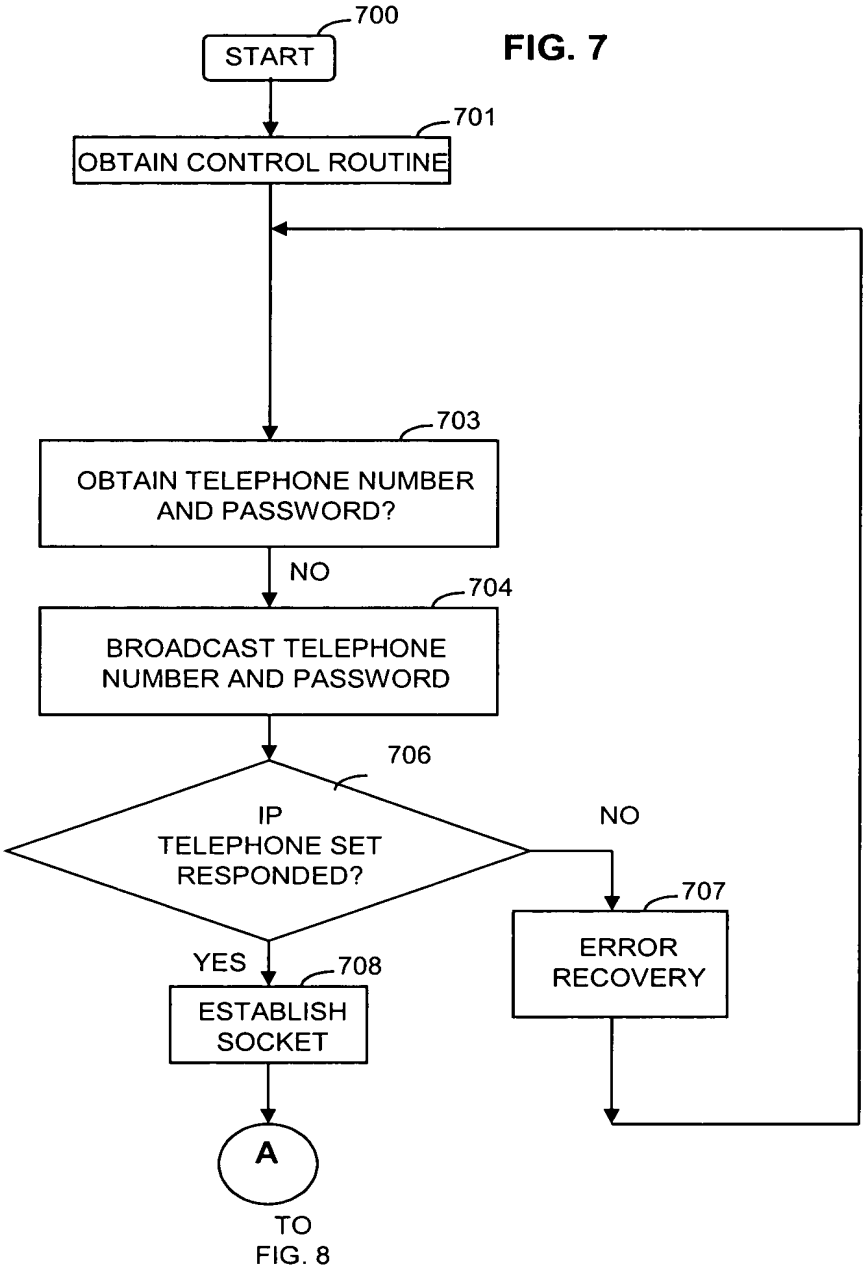

700
START
701
OBTAIN CONTROL ROUTINE
703
OBTAIN TELEPHONE NUMBER AND PASSWORD?
NO
704
BROADCAST TELEPHONE NUMBER AND PASSWORD
706
IP TELEPHONE SET RESPONDED?
NO
707
ERROR RECOVERY
YES
708
ESTABLISH SOCKET
A
TO FIG. 8

FIG. 7

FIG. 8

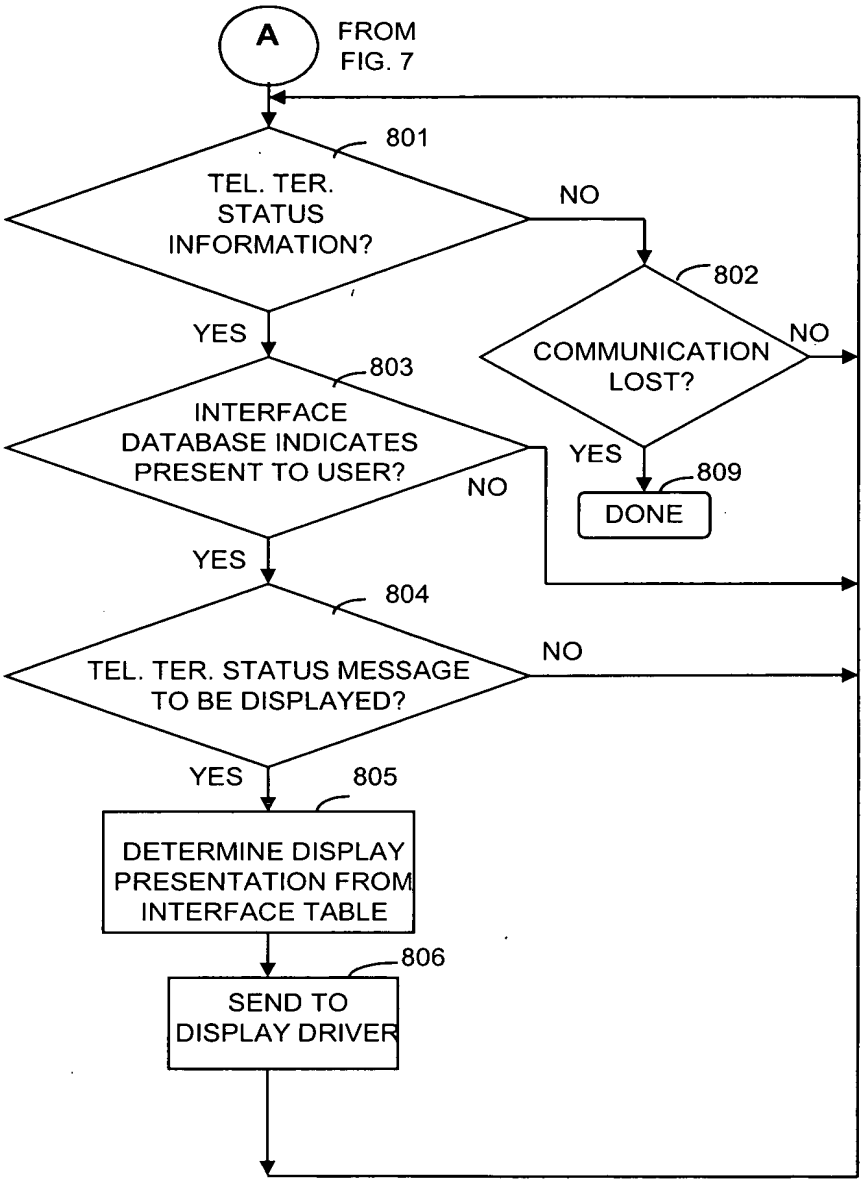

A
FROM FIG. 7
801
TEL. TER. STATUS INFORMATION?
NO
YES
802
COMMUNICATION LOST?
NO
YES
803
INTERFACE DATABASE INDICATES PRESENT TO USER?
NO
YES
809
DONE
804
TEL. TER. STATUS MESSAGE TO BE DISPLAYED?
NO
YES
805
DETERMINE DISPLAY PRESENTATION FROM INTERFACE TABLE
806
SEND TO DISPLAY DRIVER

FIG. 9

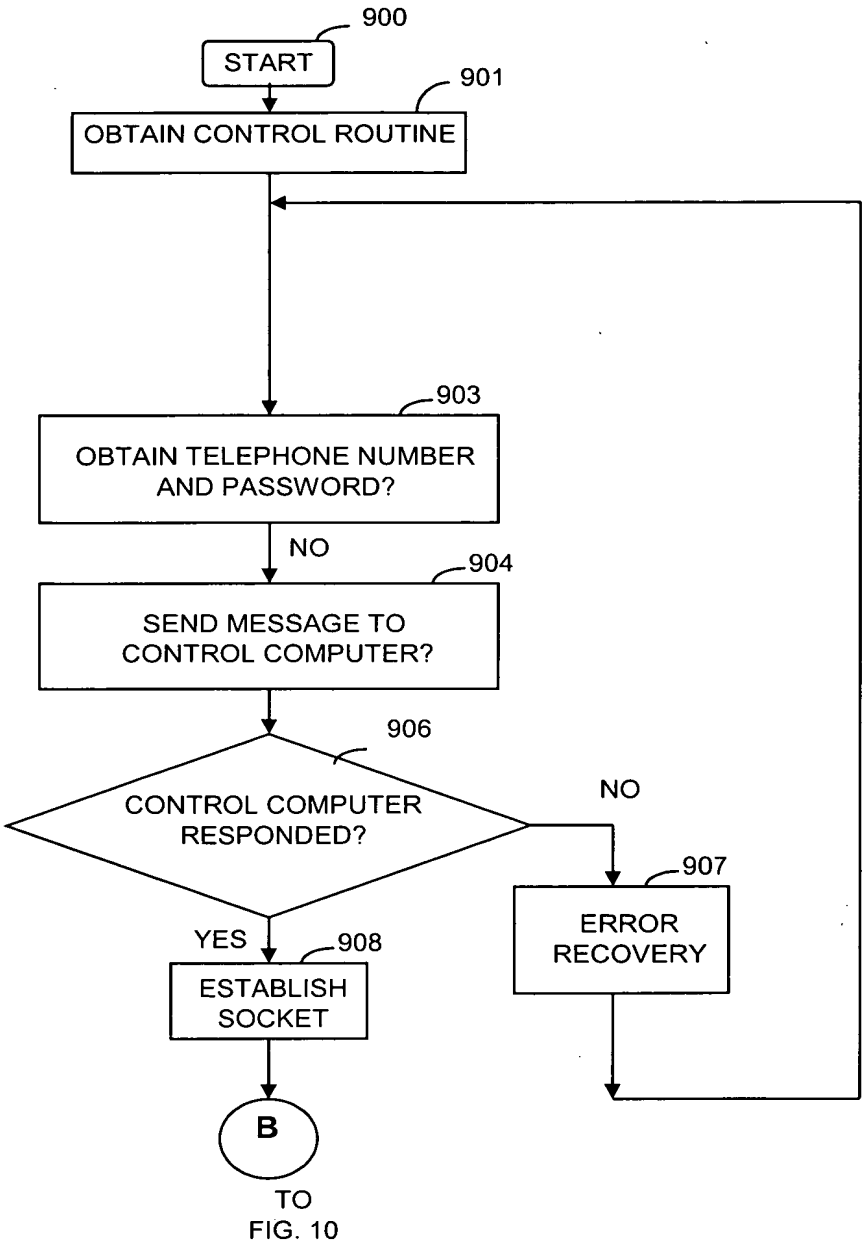

900
START
901
OBTAIN CONTROL ROUTINE
903
OBTAIN TELEPHONE NUMBER AND PASSWORD?
NO
904
SEND MESSAGE TO CONTROL COMPUTER?
906
CONTROL COMPUTER RESPONDED?
NO
907
ERROR RECOVERY
YES
908
ESTABLISH SOCKET
B
TO FIG. 10

FIG. 10

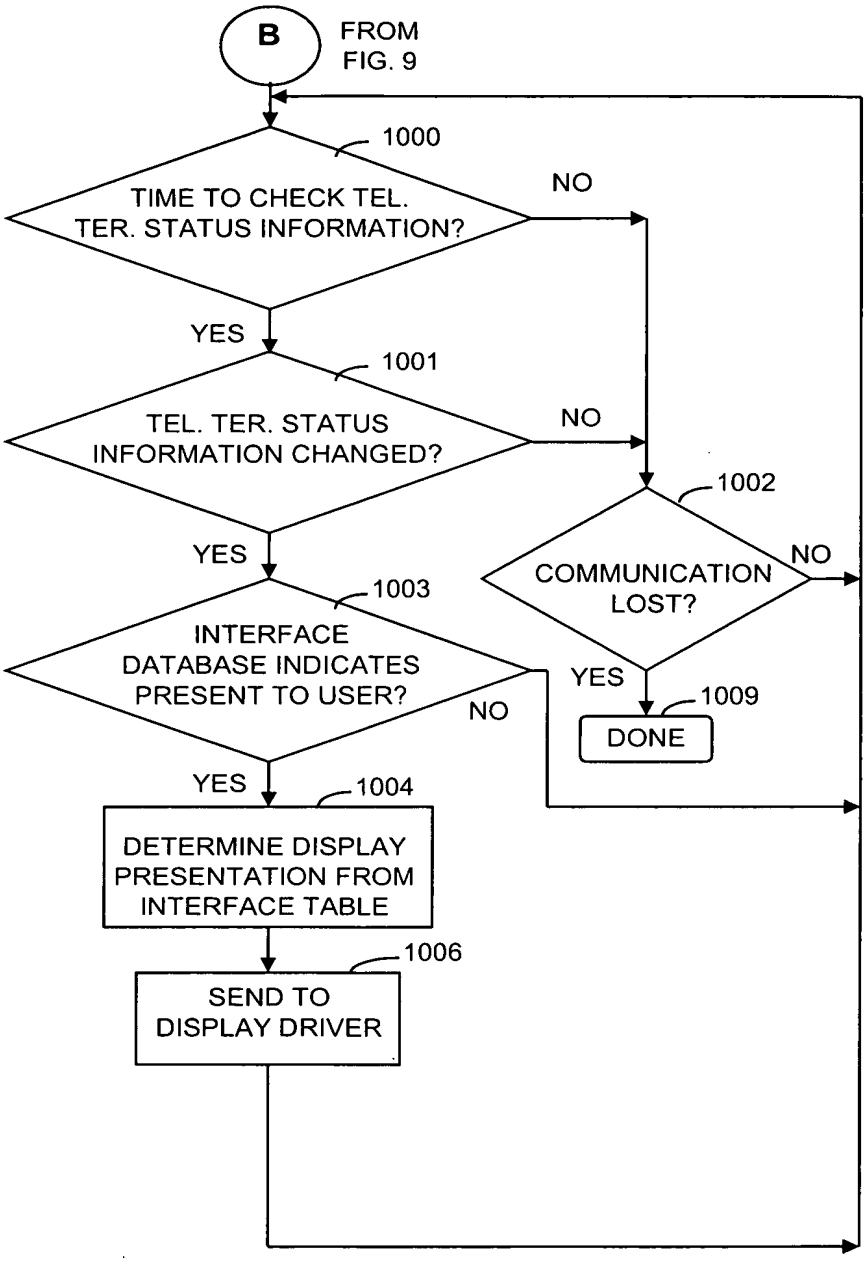
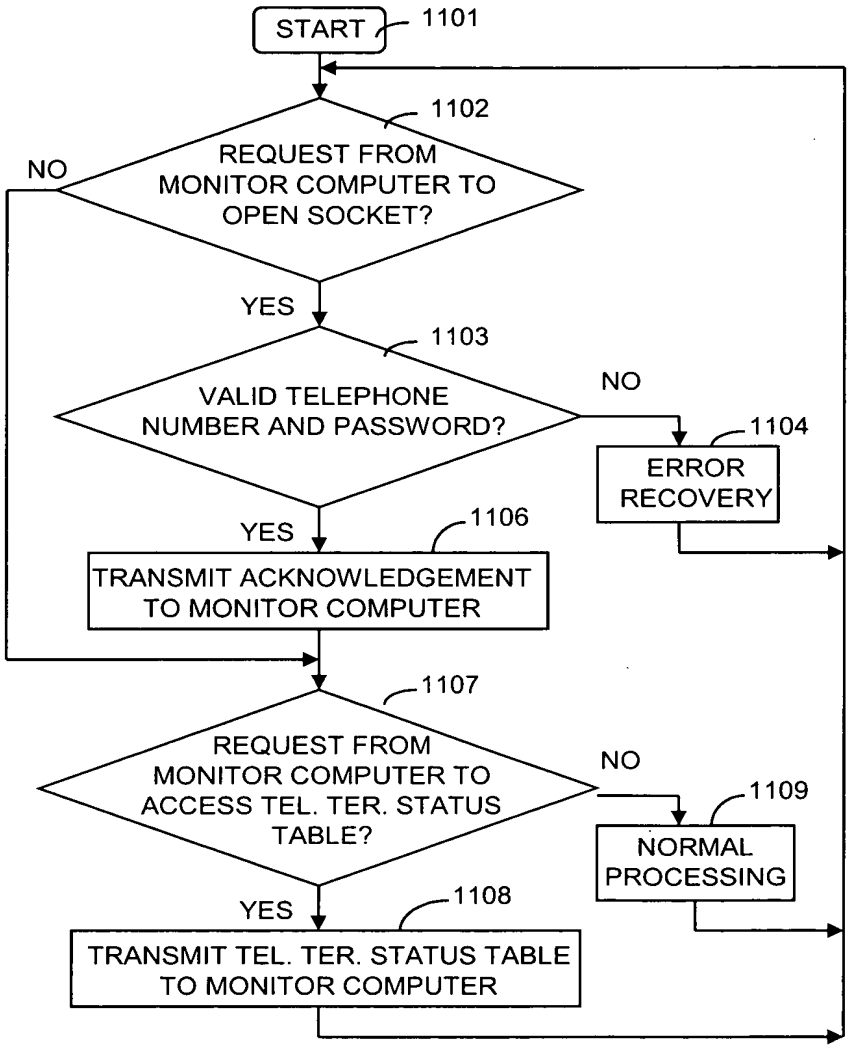

B
FROM FIG. 9
1000
TIME TO CHECK TEL. TER. STATUS INFORMATION?
NO
YES
1001
TEL. TER. STATUS INFORMATION CHANGED?
NO
YES
1002
COMMUNICATION LOST?
NO
YES
1003
INTERFACE DATABASE INDICATES PRESENT TO USER?
NO
YES
1009
DONE
1004
DETERMINE DISPLAY PRESENTATION FROM INTERFACE TABLE
1006
SEND TO DISPLAY DRIVER

FIG. 11


START
1101
1102
REQUEST FROM MONITOR COMPUTER TO OPEN SOCKET?
NO
YES
1103
VALID TELEPHONE NUMBER AND PASSWORD?
NO
1104
ERROR RECOVERY
YES
1106
TRANSMIT ACKNOWLEDGEMENT TO MONITOR COMPUTER
1107
REQUEST FROM MONITOR COMPUTER TO ACCESS TEL. TER. STATUS TABLE?
NO
1109
NORMAL PROCESSING
YES
1108
TRANSMIT TEL. TER. STATUS TABLE TO MONITOR COMPUTER